Is Burn Pit Smoke Affecting Your Health?

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Service members, Veterans, Congress, and the media continue to raise legitimate questions pertaining to the use of burn pits in theater and whether they pose any health risks to those who injest their smoke. The Department of Defense (DoD) also has unanswered questions regarding whether there are any long-term health risks associated with the smoke. It is known that exposure to burn pit smoke can result in irritated eyes and nasal passages, sore throats, and prolonged coughs, but any long-term health effects are less identifiable. The DoD takes the smoke exposures very seriously as part of its responsibility to ensure Service members remain protected from environmental hazards in the deployed setting.

The Department's Force Health Protection and Readiness Program is focused on the identification of health risks and the protection of deployed personnel from injury and illness. The DoD has captuted hundreds of air samples associated with burn pit smoke and continuously monitors health outcome data on personnel in theater and after their return. An extensive health risk assessment was accomplished at Joint Base Balad, the largest burn pit at the time, before the burn pit closed. Neither the health risk assessment (validated by the Defense Health Board) nor the health studies accomplished by the DoD have identified any specific long-term health risks. However, based on ongoing concerns from some medical providers, Service members, and Veterans, the DoD continues to study burn pit emissions. In addition, the Institute of Medicine has embarked an a comprehensive study with noted experts in environmental and occupational health to study the problem.

So why are burn pits necessary? At many forward operating bases in Iraq and Afghanistan, where few other options are available, burn pits are an expedient method of disposing solid waste. There are no landfills or local national contractors available in these areas and trash that is not disposed of in a timely manner can attract rats and disease transmitting insects that pose serious public health risks. Burn pits vary in size with size generally corresponding to the number of personnel assigned to a location. Some installations have burn pits that are quite large like the pit that covered multiple acres at Joint Base Balad (closed Oct 2009). At smaller forward operating bases there may only be a single trench or barrel where waste is burned. The amount and type of trash being burned and the amount of smoke produced will vary on a camp by camp basis – though hazardous items are always prohibited from being burned. The direction of the wind and the actual location of the burn pit, trench or barrel determines the degree of smoke exposure, if any, to personnel.

The U.S. Central Command is committed to reducing smoke exposure for personnel in Iraq, Afghanistan, and elsewhere. They are working to install incinerators wherever feasible; working to prevent or reduce the smoke exposures by repositioning burn pits to locations where the smoke does not expose personnel; improving the regulation of materials being burned; and implementing waste reduction policies including the use of recycling and composting wherever possible. As of March 2010, there were 28 solid waste and 23 medical incinerators in Iraq (all operational), and 13 more are to be installed under an expedited construction schedule. In Afghanistan, one solid waste incinerator, five Munson burners (concrete boxes which burn waste at high temperatures to reduce harmful emissions), and 13 medical waste incinerators were operational, with over 125 additional units in the planning stage.

The DoD recognizes that burn pit smoke exposures, no matter the size of the burn pit, adversely affect quality of life and also result in some relatively mild, and usually temporary health effects in our Service members. Although there is no evidence that burn pits have harmed the long-term health of our Service members, the DoD is not yet satisfied, so they continue to study burn pits and personnel exposed to the smoke to identify any health risks. DoD believes, however, it is plausible that certain individuals who may be more susceptible to the effects of burn pits may be adversely affected. The reasons for this could be genetic, medical history of illnesses suffered in the past, pre-existing medical conditions, or combined exposures to airborne sand and dust, tobacco smoke, diesel exhaust, industrial pollutants, or other airborne hazards. Efforts to understand more about burn pit emissions are ongoing, and additional health studies are underway. The DoD will continue to monitor and sample additional burn pits throughout 2010. In the meantime, U.S. Central Command is working hard to reduce smoke exposures. Individuals who feel they have been adversely affected by burn pit smoke should seek treatment at a DoD medical treatment facility or the Department of Veterans Affairs, depending on eligibility.